

REMARKS

Claims 1, 3, and 39 stand rejected under 35 U.S.C. 102(b) as being anticipated by Ichikawa (JP 03-171512). Applicants respectfully traverse this rejection because the cited reference does not disclose (or suggest) a fault repairing method, a conductive film for the fault repairing method, or contact holes that reach a surface of a transparent glass substrate, all as featured in the present invention, as amended.

The outstanding Section 102 rejection of independent claims 1 and 3 is deficient for several reasons. First, the cited Ichikawa reference does not actually teach a fault repairing method, as asserted by the Examiner. In fact, Ichikawa only teaches the structural formation of an active matrix board for the purposes of relieving stress of a wiring electrode on the board, and not for the purpose of repairing any faults in the wiring electrode itself. Ichikawa's stated purpose (see Constitution) is to avoid faults in the wire in the first place, and not to repair the wires after the fact. Ichikawa remains silent regarding any fault repairing process, and therefore the rejection is traversed for at least these reasons.

Second, the Examiner erroneously asserts that Ichikawa's divided conductors 1 are conductive films to repair data lines, and that divided upper layer conductors 2 are conductive films to repair gate lines. Ichikawa actually teaches away from this interpretation by the Examiner. The divided conductors 1 and 2 are an assembly that forms the entire drain and gate wiring electrodes. Ichikawa specifically teaches that the wirings are formed in a segmented fashion so as to relieve stress on any individual wire to prevent faults from occurring in the first place. In other words, Ichikawa's conductors 1 and 2 form the actual wiring electrodes themselves, and are never taught

(or suggested) to be repairing films for faults in themselves. Accordingly, for at least these reasons, the Section 102 rejection based on Ichikawa is respectfully traversed, and should be withdrawn.

Nevertheless, although no further amendments should be necessary to overcome the rejection, for the purposes of expediting prosecution only, Applicants have amended independent claims 1 and 3 to further emphasize how the present method claims are drawn toward a fault repairing method, unlike Ichikawa. In this respect, the Examiner will note that claims 1 and 3 now more clearly recite a step of conducting a disconnection inspection to find a disconnected wiring above a transparent glass substrate. As discussed above, Ichikawa does not teach (or suggest) anything relating to actually repairing a fault in the wiring. Ichikawa's divided conductors form the complete wiring electrodes themselves, and therefore would never be utilized to repair a separate fault in either of the divided conductors. Ichikawa's structure is formed for the purpose of avoiding faults in the wiring from the start, and therefore Ichikawa necessarily teaches away from a step of conducting a disconnection inspection prior to the formation of its divided conductors.

Independent claims 1 and 3 have been further amended to emphasize that the repairing contact holes reach a surface of the transparent glass substrate so as to expose the disconnected wiring. Ichikawa does not teach (or suggest) any such features for its contact holes 3. Ichikawa's contact holes are nothing more than the exposure points of the ends of the individual divided conductor segments. They are contact points only, and are not described to have any purpose or function to allow for an inspection and/or repair of a fault in the wiring. Accordingly, for at least these additional reasons, as well as those discussed above, the rejection of independent claims 1 (and its dependent claim 39) and 3 based on Ichikawa is respectfully traversed.

Claims 2 and 4 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa in view of Imura et al. (U.S. 6,239,856). Applicants respectfully traverse this rejection for at least the reasons discussed above in traversing the rejection of independent claims 1 and 3. Claim 2 depends from independent claim 1, and claim 4 depends from independent claim 3, and therefore both of these dependent claims include all of the features of their respective base claims, plus additional features. The Examiner cites Imura only for teaching a laser CVD method, and not for any of the features of the present invention discussed above that are lacking from the Ichikawa reference. This rejection is further deficient because there could be no motivation to combine Ichikawa with the teachings of Imura because Ichikawa does not even teach a fault repairing method, as erroneously asserted by the Examiner.

Claims 1-2, 5, and 39 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa in view of Yamamoto et al. (U.S. 5,600,460). Applicants initially traverse this rejection as being improper. The rejection appears to only address dependent claims 2 and 5. Regardless, Applicants traverse the rejection for at least the reasons discussed above with respect to the rejection of independent claim 1 based only on Ichikawa. Claims 2, 5, and 39 all depend from claim 1. Yamamoto is cited only for teaching the laser CVD method, and for connecting the first and second conductive films to a pixel electrode. It could not be obvious to combine Yamamoto with Ichikawa to reach the present invention because Ichikawa does not teach a fault repairing method. Furthermore, Ichikawa's divided conductors 1 and 2 could not be connected to the pixel electrode as proposed by the Examiner. As described above, Ichikawa divides its conductors into segments to form a complete wiring assembly. To connect the divided conductors 1 and 2 as

proposed by the Examiner would render Ichikawa's device essentially inoperative. Accordingly, the rejection of claims 2 and 5, as well as the repeated rejection of claims 1 and 39, is respectfully traversed, and should also be withdrawn.

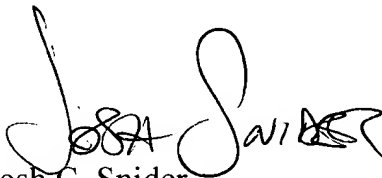
New claims 40-42 have been added to recite other combinations of features of the present invention. Independent claim 40 includes features similar to those described above with respect to independent claims 1 and 3. Support for new claim 40 can be found at least at Figs. 9, 15B, and 17A-D of the present Application, as well as the text accompanying these drawings at page 32, line 7 through page 37, line 8, and page 40, line 5 through page 43, line 9. New claims 41 and 42 both depend from new claim 40, and support for new claim 41 can be found at least at Fig. 18 and page 44, lines 10-27, and support for new claim 42 can be found at least at Fig. 16 and page 40, lines 5-25. Entry, consideration on the merits, and allowance of new claims 40-42 are also respectfully requested.

For all of the foregoing reasons, Applicants submit that this Application, including claims 1-5 and 39-42, is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if an interview would expedite prosecution.

Respectfully submitted,

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